

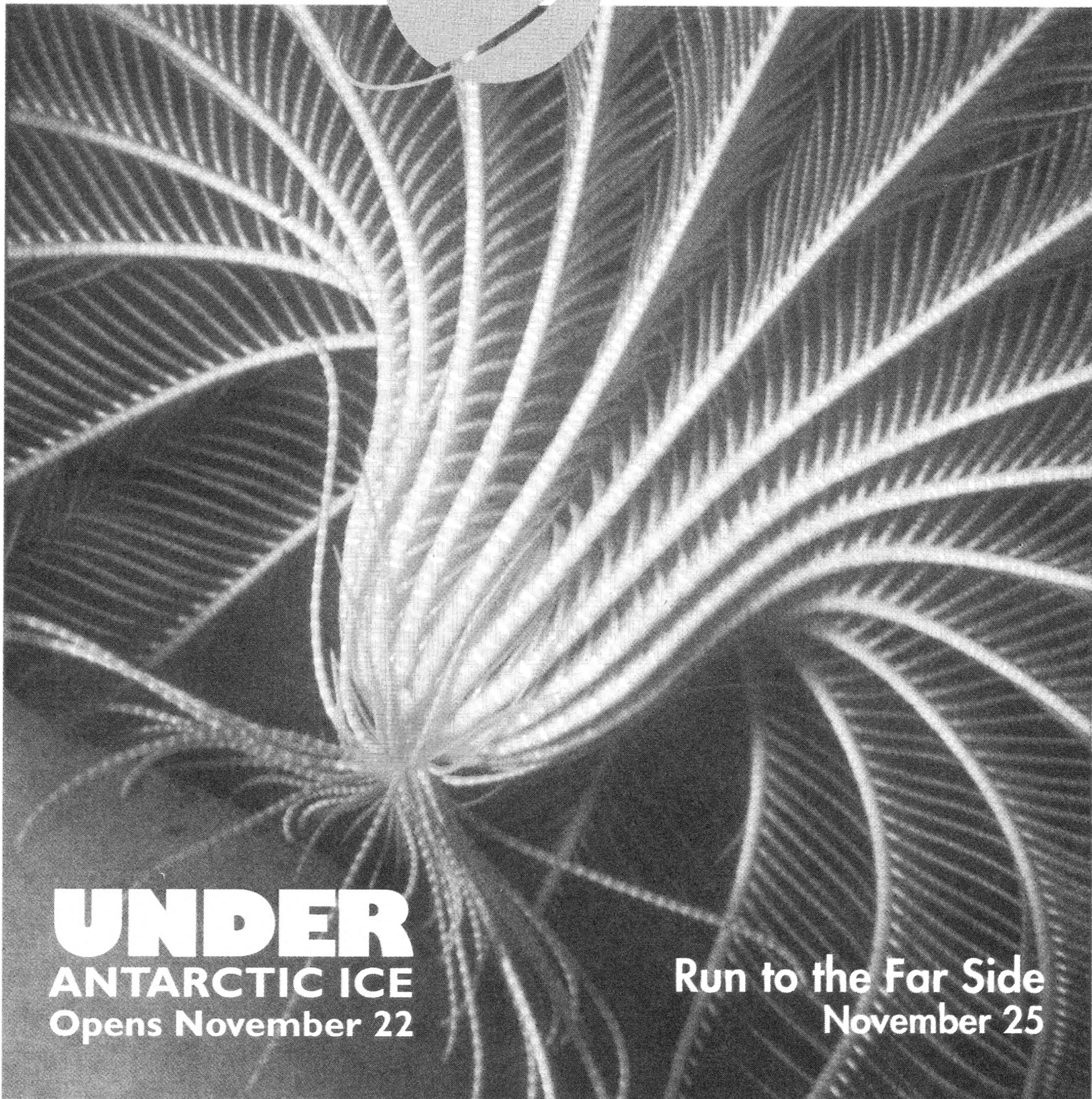


# Academy

---

California Academy of Sciences' Member Newsletter

October/November 2001



**UNDER**  
**ANTARCTIC ICE**  
Opens November 22

**Run to the Far Side**  
November 25

To explore and explain the natural world

STEINHART AQUARIUM • MORRISON PLANETARIUM • NATURAL HISTORY MUSEUM



# Message to Members

**A**t 1:30 pm local time on August 30th, I was standing on a platform in London's Saint Pancras Station when I was paged. Just as many of you were waking up that morning and turning on the radio, I heard the same news you did: a serious fire had broken out at the Academy the previous night.

Two days later I was back in town to view the damage for myself. The fire began in the office of the main gift store. We still don't know what caused it, but, at about 11:20 pm. on Wednesday, five minutes after a routine inspection, the night staff discovered a

blaze that was already too hot to be contained by hand-held fire extinguishers. The San Francisco Fire Department arrived a few minutes later. Their response was rapid, efficient, and exemplary.

Despite heat estimated to have reached 1,200 F, within 26 minutes of their arrival, the fire was out.

It was staggering to see what destruction can be caused in such a short time. There was nothing left of the store, Earth and Space Hall was a shell, many of the exhibits had melted, as did parts of the "water-hole" diorama in African Hall. Elsewhere, throughout much of the main floor, the damage was caused by soot, smoke and water. Between the hoses and the sprinklers, over half a million gallons of water rained down in that region of the Academy—and much of that filtered down to the basement and our computer center.

But the damage to the Academy, which had consumed all our attention for twelve days, suddenly paled beside the catastrophe that beset the country on September 11th. Our hearts go out to the family and friends of those whose lives were ended so tragically in New York, Washington, and Pennsylvania. We witnessed selfless firefighters converge upon a disaster unparalleled in the nation's history, only this time there were horrendous consequences and many paid the ultimate price.

The following day, our mortality was brought even closer home, with the news that the Academy's Associate Curator of Herpetology, Dr. Joseph Slowinski, had been bitten by a highly venomous snake. Joe was leading a group of Academy scientists collecting and inventorying the fauna and flora deep in the forest of northern Myanmar, five days hike from the nearest road. We made arrangements to helicopter him to a hospital, but within twenty-four hours he had died. Joe was 38. Our heartfelt sympathy goes out to his family.

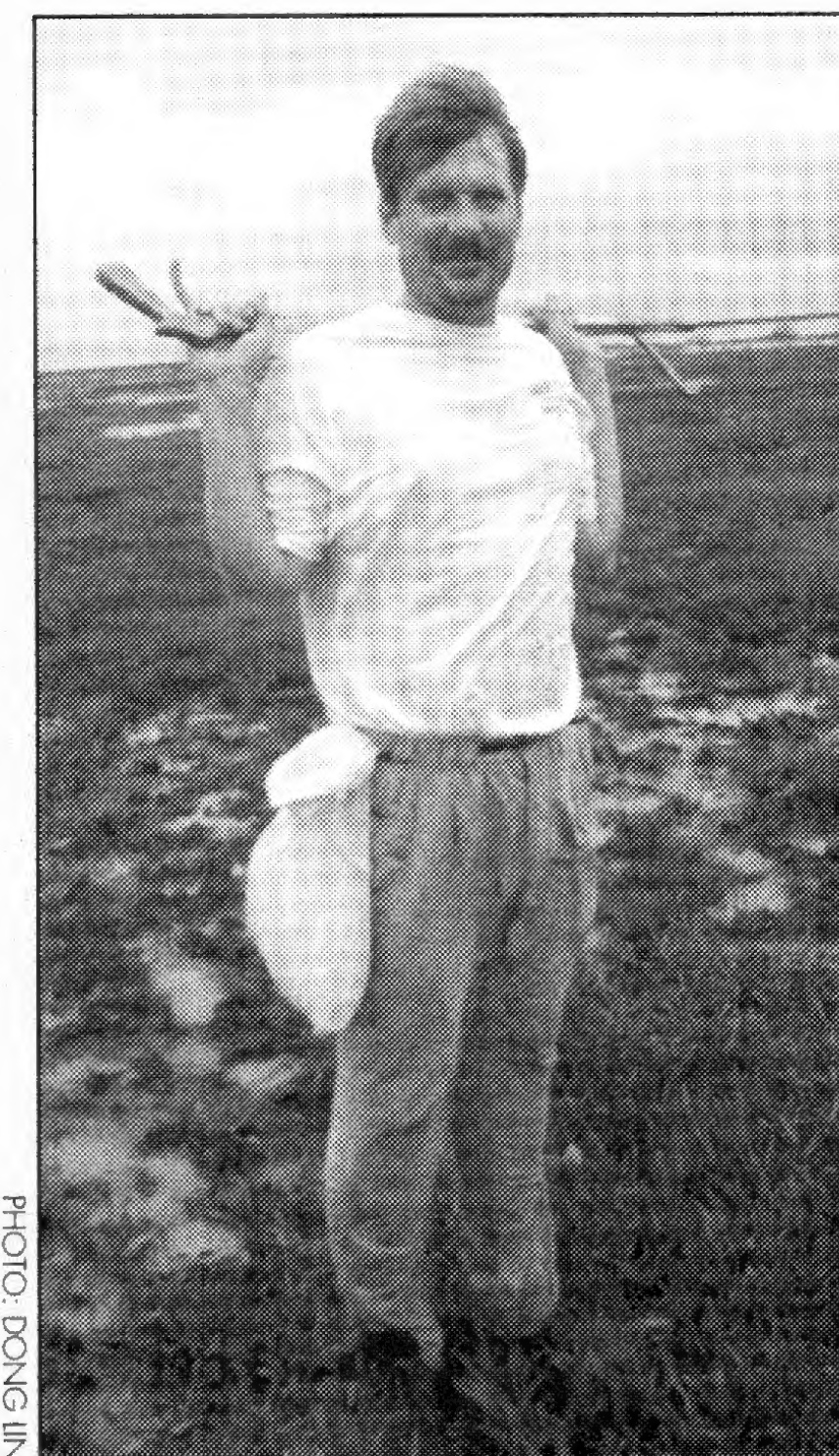
Many of you will have heard Joe lecture or read his articles in *California Wild* and the *San Francisco Examiner*. He told wonderful tales and could enchant an audience of fourth graders or his scientific peers with equal ease. He spent many days in

the field, especially in his beloved Myanmar where he had trained a team of field associates who will be able to carry on his work. His scientific output was prolific. He authored and co-authored more than 40 academic papers in herpetology and is the author of *Introduction to Genetics*. He was editor-in-chief and co-founder of the first on-line herpetological journal, *Contemporary Herpetology*, and a member of the editorial board of *Systematic Biology*. Just last month, in conjunction with Academy Botanist Dr. Peter Fritsch, he was instrumental in obtaining a grant from the National Science Foundation for our China Natural History Project, the largest grant the Academy has ever received.

Dr. Joseph Slowinski was one of a kind. He will be sorely grieved.

Meanwhile, a team of 200 restoration specialists is cleaning and repairing the Academy, and by the time you receive this newsletter, 80 percent of the exhibit floor should be open to the public. Many of you may have already come here to see the damage. If you did, you might have been surprised. The open exhibit halls should be looking as good as new, while Earth and Space Hall, would have been sealed off, and will remain so for a while.

I want to take this opportunity to thank



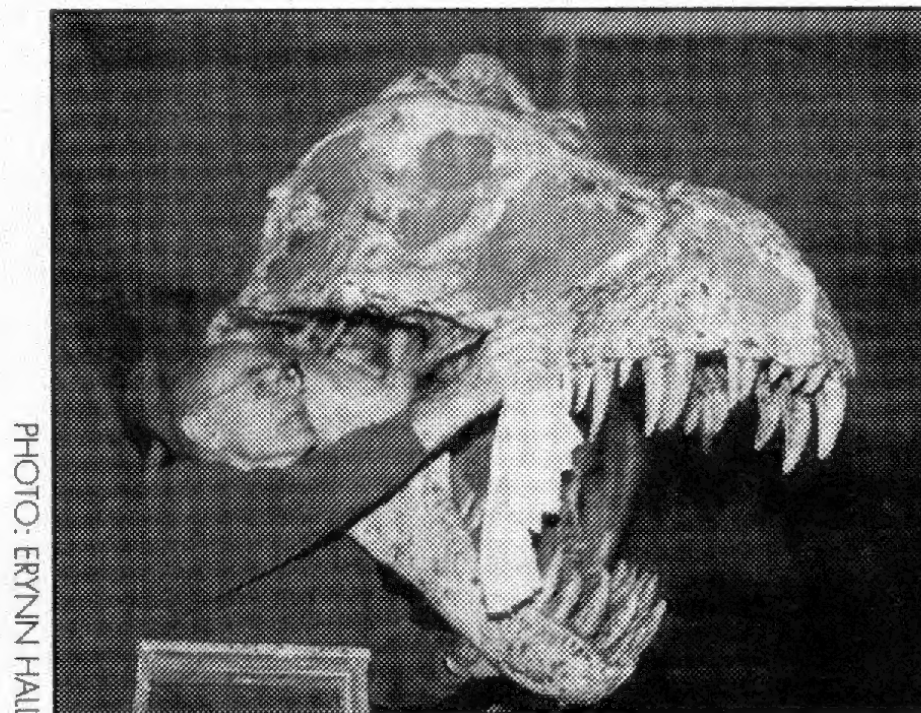
Dr. Joseph B. Slowinski, Associate Curator of Herpetology

many people and organizations for coming to our aid: the Fire Department, our sister institutions for offering much-needed space and assistance, the Academy staff for pitching in, and you, our members, for your concern and encouragement. But I especially want to thank again the Fire Department whose value and whose commitment has been thrown into such sharp focus in these last few weeks, and whose contribution to the Academy and to society we plan to honor after the Academy reopens.

Patrick Kociolek,  
Executive Director

ACADEMY (ISSN 15312224) is published bimonthly by the California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118. Telephone (415) 750-7391, Fax (415) 750-7529. Periodicals Postage Paid San Francisco, California.

POSTMASTER: Send address changes to Academy, Membership Department, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118.



Ken Graham dusts soot from the dinosaur in Cowell Hall.



## FOR MEMBERS ONLY

As the event approaches, please confirm the date and location at (415) 750-7096.

### October

#### Sharks Under Attack, Galápagos Under Siege

A Lecture with Peter Knight  
Executive Director, WildAid

Fisheries are one of the world's last great wild harvests; yet, within the past fifty years, humanity has proven beyond a doubt that oceans are not infinite. Although they're at the top of the predator chain, sharks are relatively scarce and highly vulnerable to overfishing. Their gestation periods can be longer than an elephant's, and they often produce only a handful of young which can take up to 25 years to mature. Traditionally, sharks were only eaten by poor fishing communities and were not impacted on a global scale. Within the last few years, however, the great predator has become prey as the demand for shark fin soup in Asia has driven a dramatic increase in

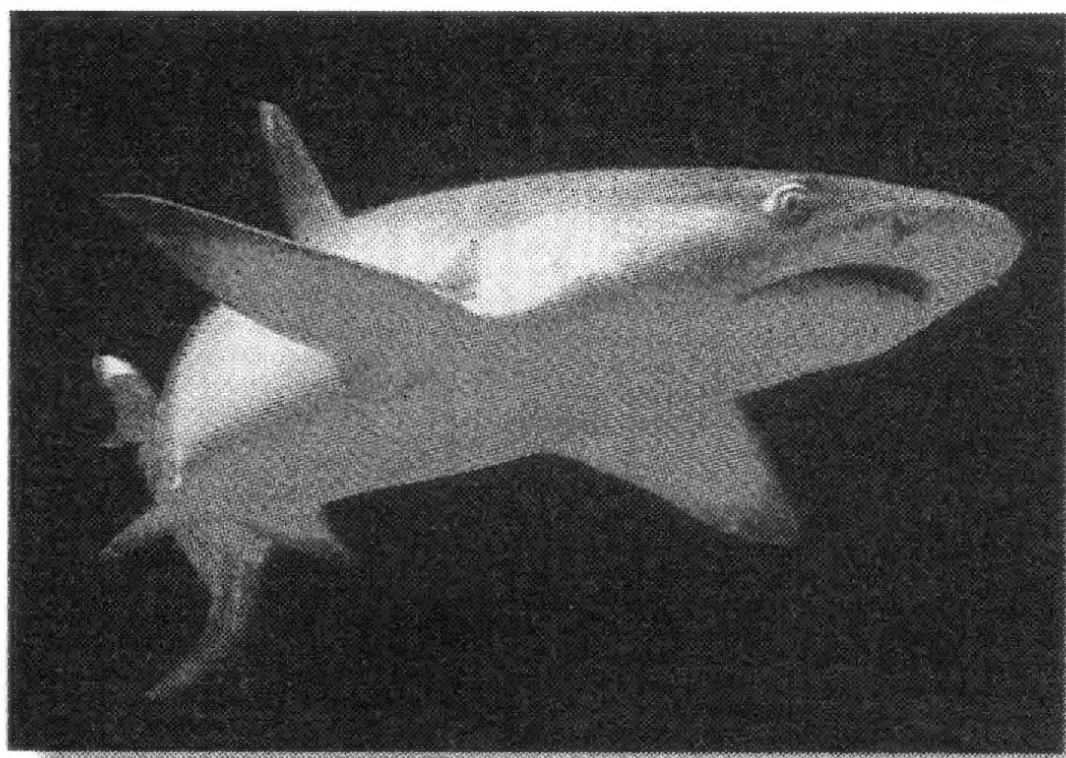


PHOTO: ACADEMY SPECIAL COLLECTIONS

*Great White Shark*

threatened. As fishing pressures have increased worldwide, marine reserves such as the Galapagos Islands have become the target of illegal fisheries.

Join Peter Knight, the Executive Director of WildAid, a San Francisco-based nonprofit that is leading the effort to educate the public worldwide on shark conservation, as he describes the situation and the efforts that are being taken to counter these threats to shark populations. He has recently returned from a trip to the Galápagos Islands, where WildAid is involved in the struggle to protect the biodiversity of marine reserves.

Wednesday, October 10 2 & 7:30 pm  
Morrison Auditorium

Please note that the October 10th Members Lecture will no longer feature Dr. Eva-Lena Rehnmark as shown in the August/September 2001 Newsletter.

#### Upcoming Members Events

**Holiday Shopping Evening  
& Entertainment**  
December 12

### November

#### Getting to the Bottom of the Bay with SFBay: 2K

A Lecture with Dr. Richard Mooi  
Curator, California Academy of Sciences

The California Academy of Sciences maintains the world's most comprehensive collections and records of the marine animals inhabiting San Francisco Bay. There are over 700 documented species of bottom-dwelling animals in the Bay, a third of which are potentially harmful alien species. In order

to understand the Bay as an ecosystem today and in the future, the Academy has launched an innovative research initiative called SFBay:2K. This research and educational program will use shore and boat-based field techniques to build data, track faunal change, and train interested members of the public. Dr. Rich Mooi will describe SFBay:2K, present some of its preliminary findings, and show how information on species distributions through time will be available to scientists, students, policy makers, and the general public.

Dr. Mooi's research focuses on the evolution and morphology of the echinoderms, a group that includes starfish and sea urchins. Using a mix of paleontology and systematics of extant forms, Dr. Mooi studies the origins of evolutionary novelty in this bizarre group of animals.

Wednesday, November 14 2 & 7:30 pm  
Morrison Auditorium

The above lectures are FREE for members. Members' guests are \$12.

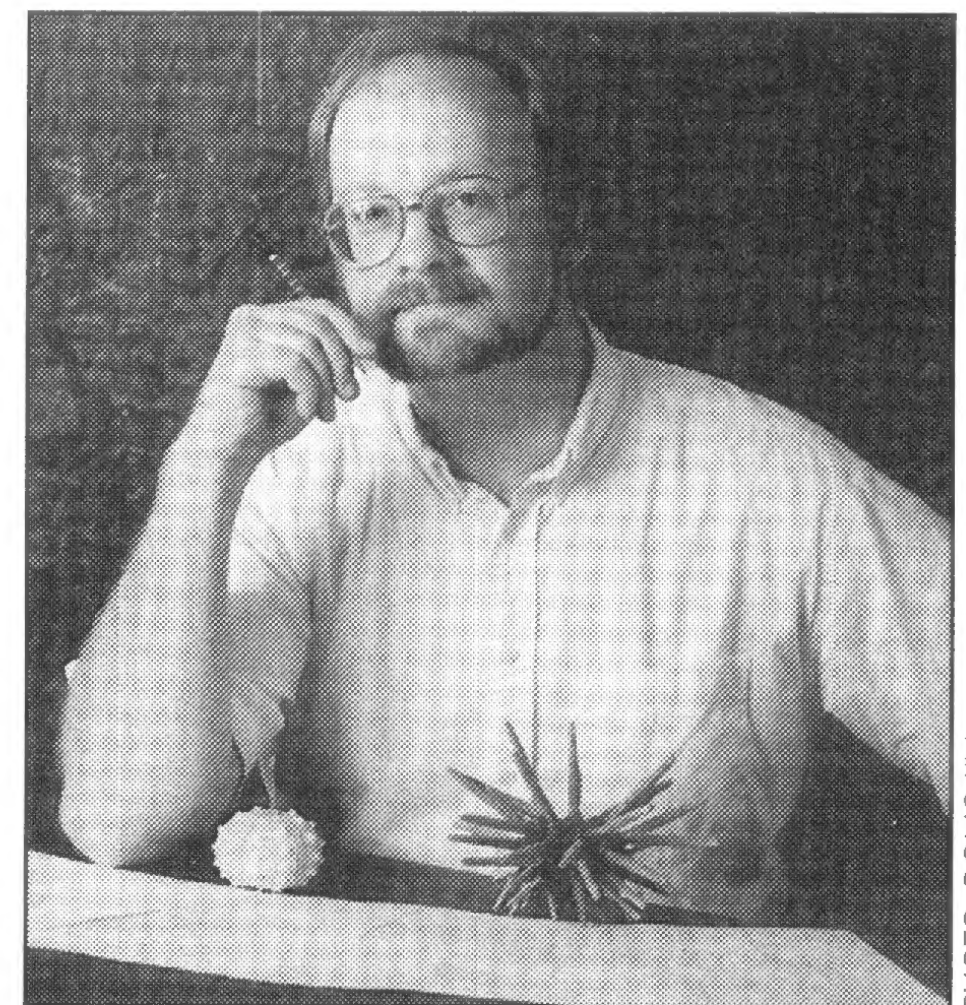


PHOTO: DONG LIN

*Dr. Rich Mooi*

#### On Our Cover

##### Under Antarctic Ice: A Photographic Exhibit

November 22 through January 15

This crinoid, *Promachocrinus kerguelensis*, is a primitive relative of sea stars. It is highly mobile and its mouth is located within the center of the ring of arms. This and other photographs taken by Norbert Wu will be on display at the Academy from November 22 through January 15.



## PUBLIC PROGRAMS

As the event approaches, please confirm the date and location at (415) 750-7348.

### Sea Birds of Baja California

Join naturalist Juan-Carlos Solis to explore the lives and conservation of the sea birds of the Baja California Peninsula, México. During this special family program we'll look at Academy specimens including bird skins, nests, eggs, feathers and more. This is a special program in honor of Latino Heritage Month.

Saturday, October 20 12:30 & 2:30 pm  
Program held in the Russia's Great Voyages exhibit.

### Havana Under the Stars

Concert with Orquesta la Moderna Tradición

Join Orquesta la Moderna Tradición and feel the rhythm of traditional Cuban music. World renowned orchestra director, Roberto Borrell, leads a unique ensemble dedicated to the performance of classical Cuban dance music, especially the lilting grooves of the danzón. Danzón is a legendary ballroom style that developed from the synchronization of African and European music in Cuba. A reception will precede the concert.



Orquesta la Moderna Tradición

Saturday, October 20 7 pm reception/7:30 pm concert in Morrison Planetarium  
\$6 members/\$8 non-members, for tickets call (415) 750-7141

### Russian Music and Folk Dancing

PHOTO: PRESIDIO PERFORMING ARTS FOUNDATION



Presidio Children's Dance Theater

Join the Presidio Children's Dance Theater and the Nikolay Prinsakar's music ensemble for Russian folk dances and music. The Presidio Children's Theater, formed by children

from the San Francisco community, aims to promote the understanding of human cultures. They have been invited to perform in New York for the United Nations' Day of Tolerance this year. Music ensemble director, Nikolay Prinsakar, is the former conductor of the National Orchestra of the Republic of Moldova. This special program is presented in conjunction with the Presidio Performing Arts Foundation.

Sunday, October 28 12:30 pm & 2:30 pm  
Location to be determined, (415) 750-7348

### American Indian Heritage Month

Explore American Indian art, traditions, and history through interactive demonstrations and performances. All programs are free with museum admission unless otherwise noted. For our most current schedule of events call (415) 750-7141 or visit our website at [www.calacademy.org](http://www.calacademy.org)

### Pow Wow Dancing

Pow Wows are public gatherings organized by and for Native Americans. They are times for singing, dancing, and renewing friendships. Dance performances and competitions have become an integral part of the Pow



Pow Wow Dancing

Wow tradition, and the so-called "fancy dance" has emerged as the most popular Pow Wow dance form. In this program, Gilbert Blacksmith, a member of the Lakota tribe, will demonstrate and discuss various styles and footwork of Pow Wow dancing. Program presented by the Traditional Arts Program.

Saturday, November 10 1 pm Morrison Auditorium

### Lakota Beadwork

Much of traditional art is devoted to the transformation of functional objects into works of art by the addition of ornamentation. Since their introduction by French traders, glass beads have been a favorite decorative medium of the Lakotas, largely replacing the dyed porcupine quills that were used previously. Today, Lakota beadwork is generally acknowledged to be among the finest in the world. One artist joked, "If something stays still long enough, we'll try to bead it." In this program, Lakota artist, Amythest Faria, demonstrates traditional beading techniques. She works mostly on jewelry—earrings, necklaces, bracelets—as well as on moccasins. Program presented by the Traditional Arts Program.

Saturday, November 17 1-3 pm Cowell Hall

### Native Peoples Family Day

Join us for a celebration in honor of the Native Peoples of America. Performances, demonstrations and hands-on activities will be offered including acorn soup making, basketry, traditional beadwork demonstrations, storytelling and more.

Saturday, November 24 10 am-3 pm  
Main Floor



---

## TRADITIONAL ARTS OF THE WORLD

---

As the event approaches, please confirm the date and location at (415) 750-7145.

Presentations are free after general museum admission, and no reservations are needed. For further information on these and other Traditional Arts Programs, contact Dr. Jennifer Michael in the Anthropology Department at (415) 750-7165, or visit [www.calacademy.org/research/anthropology/tap](http://www.calacademy.org/research/anthropology/tap). The Traditional Arts Program is funded by the Paul L. and Phyllis Wattis Foundation.

### Turkish Dance and Culture

Members of the Arkadash Turkish Folk Ensemble will perform dances from the Artvin region of northeastern Turkey and from Gaziantep, in the southeast. The costumes, music, and dances in these regions are quite different from one another and will thus help illustrate the diversity of Turkish culture. This presentation will also include a discussion of the costumes and the cultural context for the dances, along with a slideshow.

*Date to be determined Morrison Auditorium FREE*

### A Cappella Harmonies from the Streets of San Francisco

The a cappella (i.e., unaccompanied) singing style known as "doo-wop" is uniquely American. Doo-wop is considered to be part of rock and roll, but it also shares affinities with jazz and gospel. It is a predominantly African American musical tradition that emerged out of informal street-corner harmonizing in cities like New York, Philadelphia, and Chicago and became widely popular in the 1950's. The singers of Bay City Luv, performing today, continue this tradition of street-corner singing. They first met on the streets, and that is where they still perform most of their concerts of gospel and doo-wop music. This program will include selections from both these repertoires.

*Saturday, October 27 1 pm Morrison Auditorium FREE*

## A Special Series in Textile Technology

### Carpet Weaving in Wool

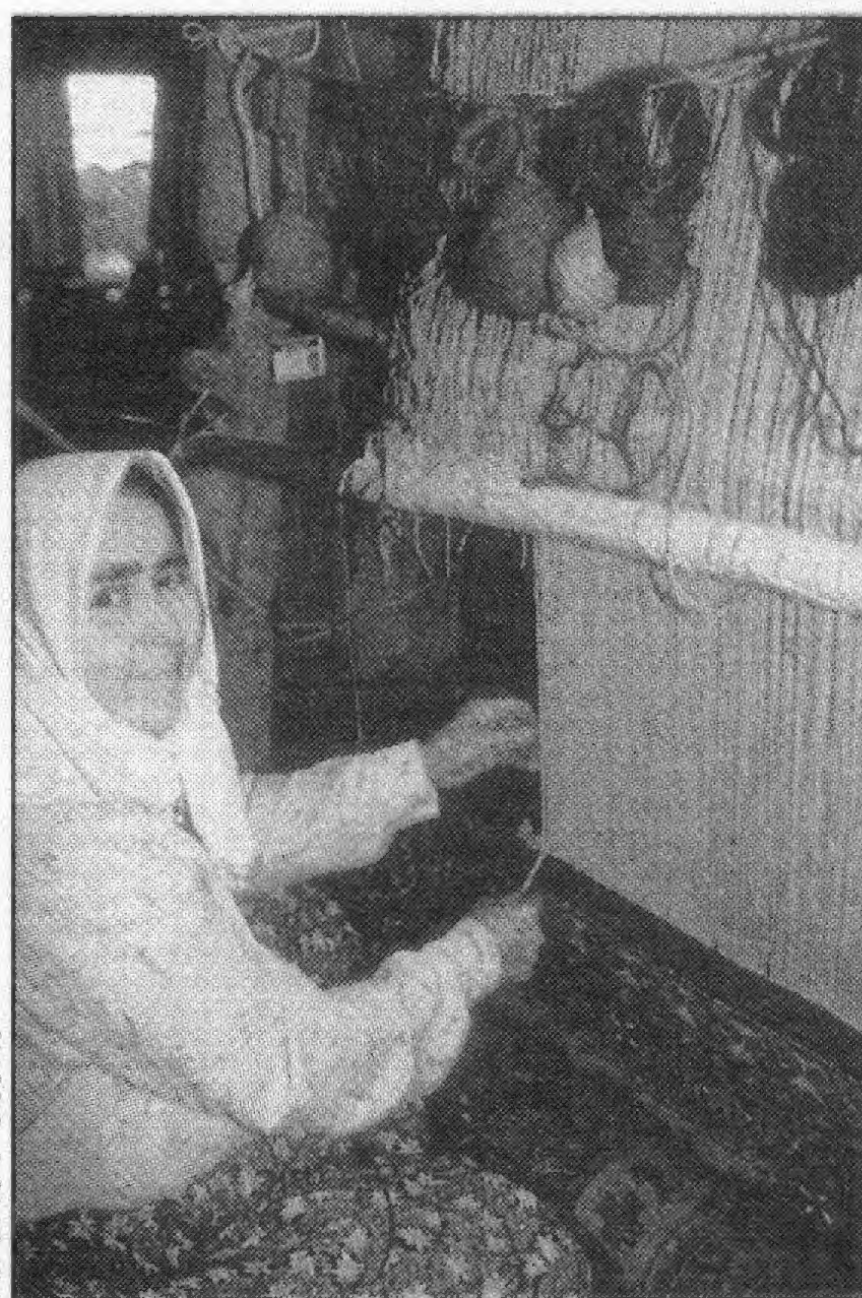


PHOTO: DONG LIN

*Cennet Deneri*

Cennet Deneri offers four days of ongoing demonstrations on her large loom. Ms. Deneri, from the village of Orselli, is President of the DOBAG weaving cooperative in western Turkey. She uses hand-dyed woolen yarns and traditional knot-tying techniques to create geometric designs that are a

colorful feast for the eyes. An accompanying educational video explains the complete process of carpet-making, from shearing sheep to the finished rug.

*Thursday–Sunday, November 1–4 10 am–4 pm daily  
Cowell Hall FREE*

### Weaving the Web: Modern Technology Meets Tradition

In this slide lecture, Dr. Serife Atlihan, Professor of Textile Arts at Marmara University in Istanbul, discusses

the application of modern technology in the carpet-weaving process, including the chemical analysis of dyes, steel loom constructions, and website marketing.

*Thursday, November 1 7 pm Goethe Room FREE*

### In Search of Natural Dyes and their Makers: A Textile Odyssey

In this slide lecture, Michelle Wipplinger, founder of Earthues, a Seattle-based company specializing in ecological dyes, talks about her thirty years of traveling the globe to collect plants, insects, and minerals, while documenting traditional dye methods among various ethnic groups. Learn what it takes to create deep indigo blue on Dabu mud cloth in India; travel with Karen hilltribe women in Northern Thailand to collect madder roots; and trek across the Andes in search of the perfect red. Join Michelle and discover the hidden colors of the natural world.

*Friday, November 2 7 pm Goethe Room FREE*

### Silk Weaving

Two days of silk weaving demonstrations by local Turkish weaver Gülizar Baggson. Ms. Baggson learned to make exquisite silk rugs as a child growing up in Hereke, Turkey. She uses the same techniques as those employed in woolen carpets, but the results are remarkably different.

*Saturday–Sunday, November 3–4 10 am–4 pm  
Cowell Hall FREE*

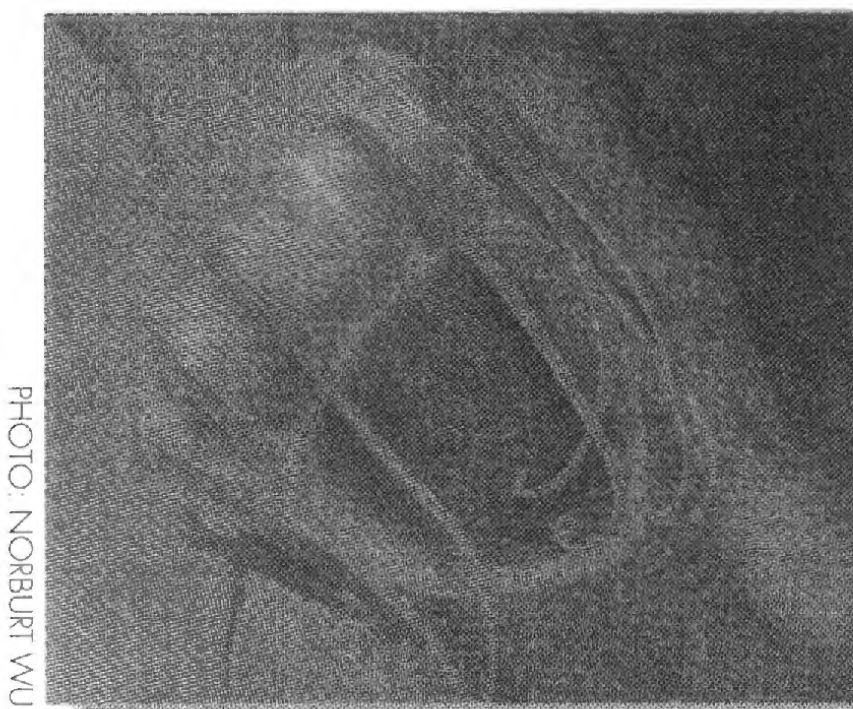


## EXHIBITS & SYMPOSIA

### Under Antarctic Ice

#### A Photographic Exhibit by Norbert Wu

Opening November 22



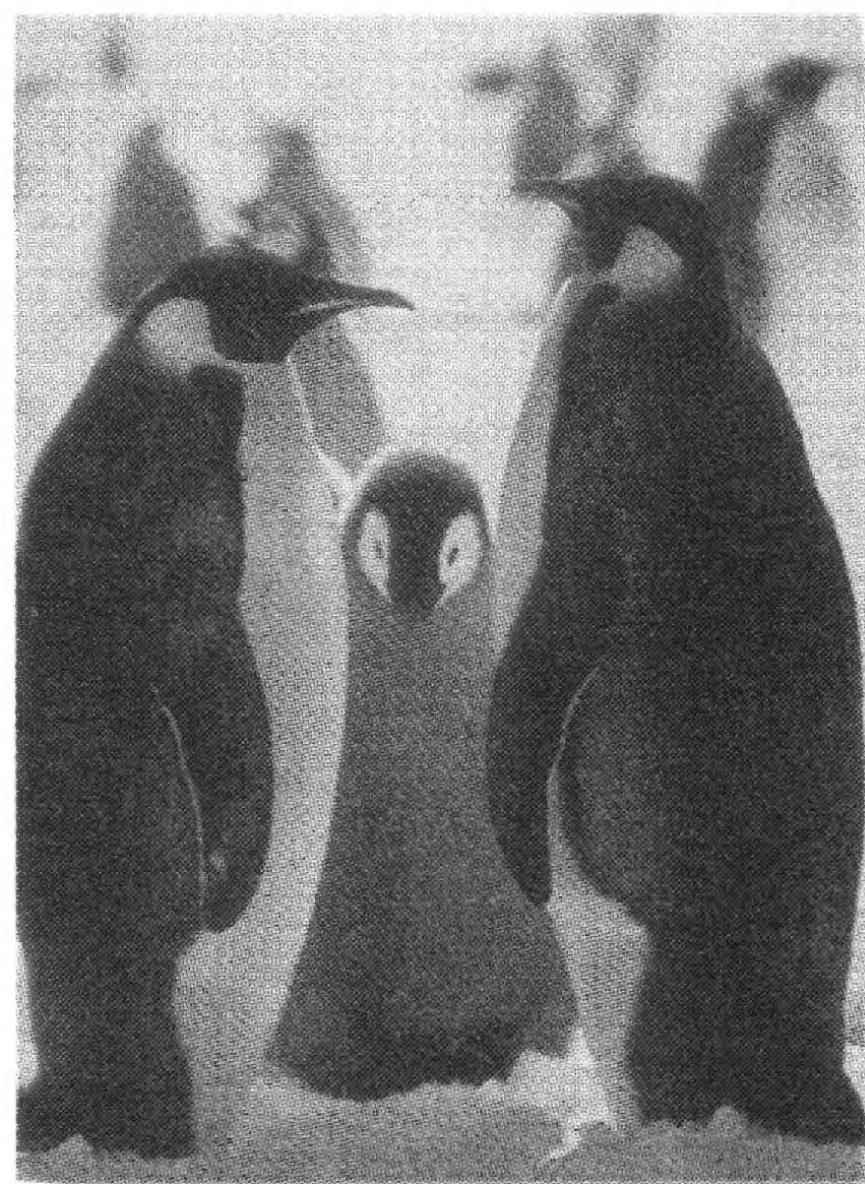
*Jelly and Iceberg, near Cape Evans*

cinematographer, and writer—captures this surprisingly rich community at the bottom of the earth with forty spectacular large format photographs featured in *Under Antarctic Ice*.

Wu's photographs of Antarctica have been acclaimed as the finest photographs ever taken in this harsh environment and have been published in the world's leading magazines, including *National Geographic*.

The exhibition, consisting of a selection of the most compelling photographs from Wu's three expeditions, offers viewers a close-up view

With hurricane-force winds and cold that can kill in minutes, Antarctica's surface hosts little year-round life. But beneath its frozen seas lies one of the earth's most stable and vibrant ecosystems—and one of its most enchanting realms. Norbert Wu—photographer,



*Emperor Penguins and chick, Cape Washington. Parents can recognize the chick's call among over 20,000.*

### Library Highlights

Children's Story Time  
Ages 3–7

Join Academy librarians to learn more about natural history and culture. October's Story Time will feature books related to Latino Heritage Month. November's Story Time will highlight storybooks with Native American themes in honor of Native American Heritage month. More information about Story Time, is available at [www.calacademy.org/research/library/biodiv/storytime.htm](http://www.calacademy.org/research/library/biodiv/storytime.htm).

October and November Saturdays 10:30 am Cowell Hall

of the severe conditions Wu and his team endured.

*Under Antarctic Ice*, which originated at the Pacific Grove Museum of Natural History, will be open from November 22 through January 15, 2002.

### Domestic California

October 20, 2001–early 2002

In this exhibit, artist Mark Brest van Kempen looks at ordinary street corners with the eye of an explorer. In collaboration with scientists at the Academy, Brest van Kempen will examine the ecology of five urban sites around San Francisco and will also contrast the current sites with computer reconstructions of what the sites looked like three hundred years ago. In this context the ordinary becomes extraordinary: a weed growing in a crack in the pavement might be a host plant for an endangered species of butterfly. Peregrine Falcons and Cooper's Hawks hunt pigeons in the most unlikely urban settings. Where people hurry along the sidewalk today a creek once flowed with trout and stickleback living in it. The exhibit gives a new view into the ecology of urban sites and questions our understanding of what nature is.

*Domestic California*, which premieres at the Academy, will be open from October 20 through early 2002.

### Nature's Music: The Science of Bird Song

A symposium dedicated to the memory  
of Dr. Luis Baptista

Peter Marler and Robert Bowman will reflect on Luis Baptista's lifetime achievements, and together with seven other distinguished speakers will visit many themes that engaged Luis' interest in the study of bird song. The fact that songbirds learn how to sing is the basis for many questions to be addressed; as humans we will often find ourselves reminded of our own speech behavior. For example, does the cultural transmission of local dialects in birdsong have anything in common with human dialects? What is it about a male's voice that females find attractive, in birds as well as in humans? There is a fascinating relationship between our own music, the vocal virtuosity of birds and the attractiveness of song in its broadest sense.

Saturday, November 3, 2001 9 am–5:45 pm  
Morrison Auditorium

Symposium \$35 members, \$45 non-members,  
\$25 students

Reception (additional \$45 per person) follows at 6 pm  
For a brochure call (415) 750-7378, or check the website  
at [www.calacademy.org/research/bmammals/baptista\\_symposium/](http://www.calacademy.org/research/bmammals/baptista_symposium/)  
Advance registration is advised.



# The Academy's 17th Annual Run to the Far Side

Sunday, November 25

It's that time of year again. Bring out the turkey, cranberry sauce, stuffing, and top it all off with a Run to the Far Side! The 5K and 10K Run to the Far Side is a Thanksgiving weekend tradition that pays tribute to the zany cartoon creations of Gary Larson. It is the only race where herds of costumed cows, chickens, squid, cavemen, and assorted Far Side fanatics compete side-by-side with serious athletes in a beautiful jaunt through Golden Gate Park.

Costumes honoring Larson cartoon characters are a race tradition in the 5K, with a costume contest following the race. Those more interested in slimming their waistline from the recent Thanksgiving dinner feast are invited to join in the 10K run.

The race starts at 8:30 am near the Academy of Sciences. The race's many loyal sponsors provide additional incentives

to participants with post-race refreshments, entertainment, and festivities on the Music Concourse after the run.

Prizes for the 1st place winners of the 5K and 10K race and costume contest include Run to the Far Side memorabilia autographed by Gary Larson.

Following the race, registered runners are invited into the Academy of Sciences to enjoy the Steinhart Aquarium and natural history museum for free. **Public transportation, carpooling and bicycling are strongly encouraged.**

Registration fees are \$18 for members of the Academy of Sciences and \$23 for nonmembers, or \$30 for all on race morning. Race fees support environmental

education and research programs at the Academy of Sciences. To register, please send this registration form by November 16, or register online at [www.calacademy.org](http://www.calacademy.org).



PHOTO: CHARLOTTE FIORI



AT&T Wireless • SuperShuttle • Tropicana Pure Premium

Host/Beneficiary: California Academy of Sciences | Race Management: RhodyCo Productions | RACE HOTLINE: (415) 759-2690

**PRE-REGISTER:** by November 16 for \$23. (Members of the California Academy of Sciences are \$18.) Mail checks (payable to C.A.S.), signed, completed entry form and a self-addressed, stamped envelope to **RUN TO THE FAR SIDE** c/o RhodyCo Productions - 1417 Irving Street, San Francisco, CA 94122. **OR JOIN US RACE DAY FOR \$30. Sorry, no refunds. One entry per person.**

Run to the Far Side XVII

SEX	<input type="checkbox"/> M <input type="checkbox"/> F	DATE OF BIRTH	MONTH <input type="text"/> DAY <input type="text"/> YEAR <input type="text"/>	Age (on race day)	<input type="text"/>	WHEELCHAIR	<input type="checkbox"/>	For Official Use Only
LAST NAME	<input type="text"/>							
FIRST	<input type="text"/>							
ADDRESS	<input type="text"/>							
CITY	<input type="text"/>				STATE	<input type="text"/>	ZIP	<input type="text"/>
<input type="checkbox"/> 5K <input type="checkbox"/> 10K	<input type="checkbox"/> CALIFORNIA ACADEMY OF SCIENCES MEMBER # <input type="text"/>	<input type="checkbox"/> NON-MEMBER	PHONE#	<input type="text"/>				

**WAIVER:** In consideration of your accepting this entry for RUN TO THE FAR SIDE XVII held on November 25, 2001, I, intending to be legally bound, do hereby for myself, my heirs, executors, and administrators waive and release any and all rights and claims for damages I may accrue against the California Academy of Sciences, the Recreation and Parks Department, City and County of San Francisco, RhodyCo Productions, Buzzword Productions, USA Track & Field, their employees, representatives, all sponsors and volunteers for any and all injuries that may be suffered by me at or enroute to or from the event. I attest that I am physically fit and sufficiently trained for this competition, my physical condition verified by a licensed M.D. during the last six months. I will assume my own medical and emergency expenses in the event of an accident or other incapacity or injury resulting from or occurring from my participation. As part of the waiver I acknowledge that I have read and understand all of the above and, in consideration of this being an amateur event, I grant full permission to any and all organizations which obtain photographs, motion pictures, videotapes, recording or any other record of this event to use them for any purpose whatsoever.

SIGNATURE \_\_\_\_\_

DATE: \_\_\_\_\_

ALL ENTRANTS MUST READ & SIGN WAIVER. (Parent or Guardian must sign if under 18)

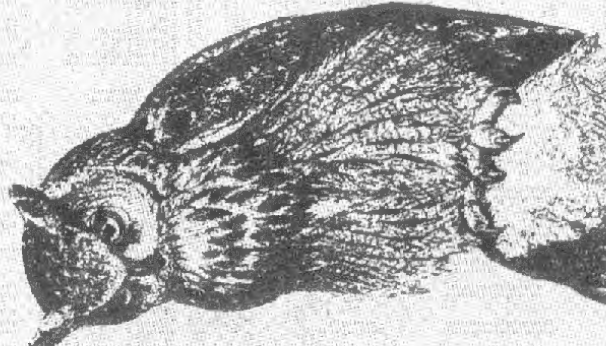


# October 2001 at the Academy

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	George Lindsay becomes Academy Director, 1963	2 Full Moon	3	4	5	6 Turkish Dance and Culture (p. 5)
7	8 Peak of the Draconid meteor shower.	9 Last quarter Moon	10 Lecture: Shark Under Attack (p. 3)	11	12 	13
14 	15	16 Lecture: Beauty and the Accelerating Universe (p. 12) Lecture: Russian California (p. 11) New Moon.	17	18	19	20 Concert: Havana Under the Stars (p. 4) Sea Birds of Baja California (p. 4)
21 Peak of the Orionid meteor shower	22	23 First quarter Moon	24	25 Lecture: The Art and Activism of Ansel Adams (p. 11)	26 Halloween Party: The Swamp Romp (p. 13)	27 A Capella Harmonies of San Francisco (p. 5)
28 Russian Music and Folk Dancing (p. 4) Return to Standard Time	29	30	31 Full Moon			



# November 2001 at the Academy

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
4 Carpet Weaving in Wool (p. 5) Silk Weaving (p. 5)	5	 6 Premiere performance of the Morrison Planetarium, 1952	7 14 Lecture: Getting to the Bottom of the Bay (p. 3) New Moon	1 Carpet Weaving in Wool (p. 5) Weaving the Web (p. 5) 8 Last quarter Moon	2 Carpet Weaving in Wool (p. 5) In Search of Natural Dyes and their Makers (p. 5) 16 	3 Carpet Weaving in Wool (p. 5) Silk Weaving (p. 5) <b>Nature's Music: A Symposium Dedicated to Luis Baptista</b> (p. 6) 10 Pow Wow Dancing (p. 4)
11 Approval given to begin construction of CAS museum in Golden Gate Park, 1910	12	13	20 Lecture: Will the Universe Expand Forever (p. 12)	15 22 New Exhibit Opens: <b>Under Antarctic Ice</b> (p. 6) First quarter Moon	17 Lakota Beadwork (p. 4) Peak of the annual Leonid meteor shower	24 Native Peoples Family Day (p. 4)
18	19 	26	28	29 Lecture: Beyond the Last Village (p. 11)	23	30 Full Moon
25 Run to the Far Side (p. 7)		27				



## FIELD TRIPS, SEMINARS AND WORKSHOPS

For a complete list of the Academy's Adult, Family and Junior Academy course offerings, please check the current catalog. For a copy, or to register, call (415) 750-7100 or visit [www.calacademy.org](http://www.calacademy.org) and click on Education.

### Natural History of San Francisco Bay

Field Trip

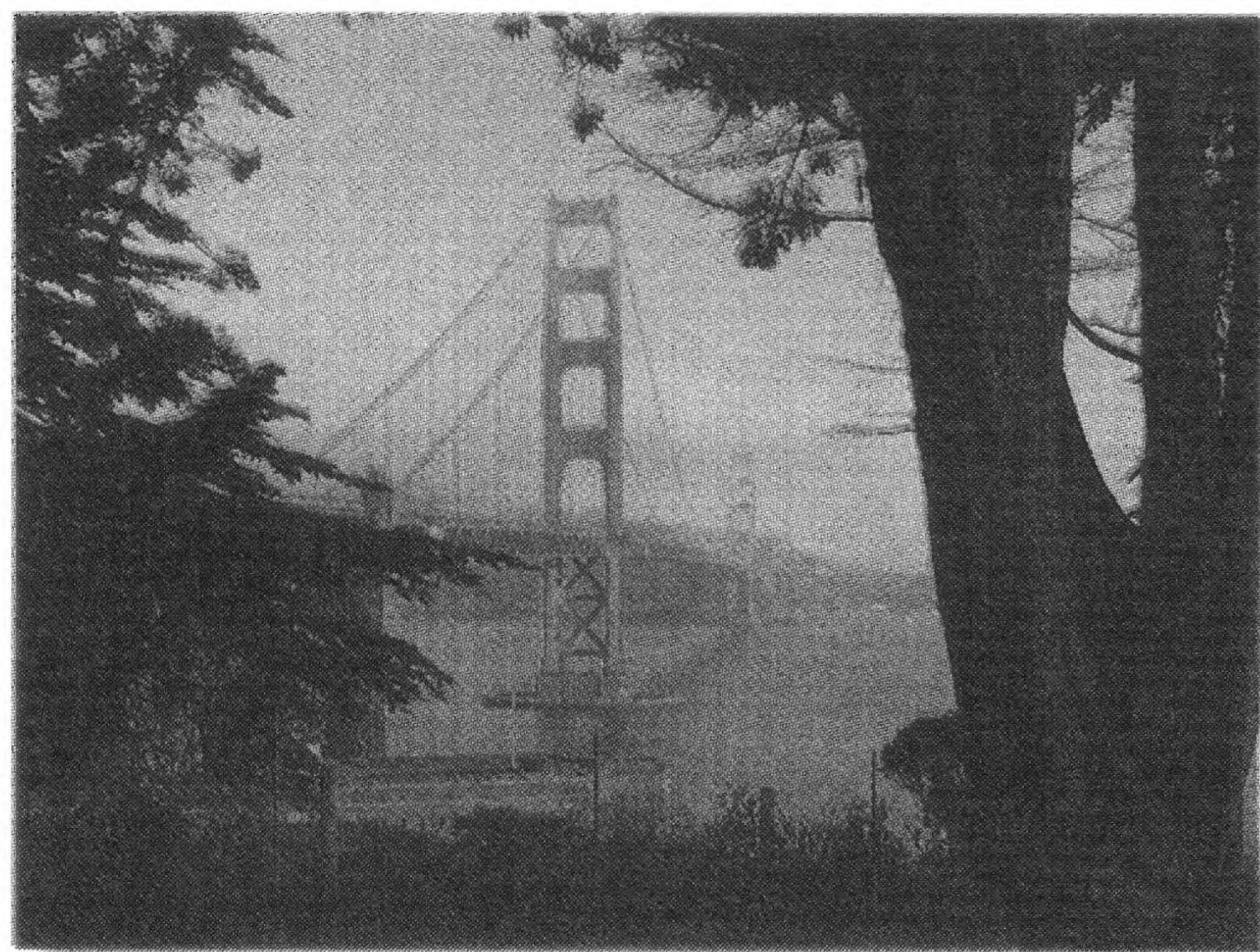


PHOTO: SOCIETY FOR ENVIRONMENTAL EDUCATION

*San Francisco's Golden Gate Bridge*

Explore the natural history of San Francisco Bay with historian Gary Holloway. Depart from Fisherman's Wharf aboard the Harbor King and follow the San Francisco shoreline to the Golden Gate Bridge. Explore the Marin County shoreline, focusing on the man-made changes to the original bay front. Learn about the geology, geography, and climatology of the area, as well as the impact of former hydraulic mining activities in the Sierra and historic toxic waste disposal on the natural habitats and fisheries of the Bay.

Gary Holloway  
Sunday, October 7 1–5 pm  
\$65 members/\$75 non-members

### Native Trees of California

Seminar and Field Trip

California has a wide diversity of trees, from the near rainforests in the northwest to the water-conserving trees in the hot deserts. Survey this amazing variety, focusing on plant communities and traits for identifying trees, from conifers to broadleaf trees. Learn to identify trees and understand their adaptations through slide-illustrated lectures and visits in the field.

Glenn Keator  
Seminars: Wednesdays, October 10, 17, 24, 31; November 7, and 14 7–9 pm  
Field Trips: Saturdays, October 27 and November 10 10 am–2:30 pm  
\$135 members/\$145 non-members

### Nature Journaling for Families: Creating Memories

Family Workshop

Record family experiences with nature by honing observational skills and practicing journaling in Golden Gate Park and at the Academy. Use sketches, collage, poetry, cartoons, stories, photos, mementos, and natural objects. Participants provide sketching materials. Open to families with children five years and older.

Diane T. Sands and Lorie Topinka  
Saturdays, October 13 and November 10 2–4 pm  
\$35 adult/\$30 child, members  
\$40 adult/\$35 child, non-members

### Basic Microscope Maintenance

Seminar

Learn how to maintain and perform simple repairs on all kinds of microscopes. This course is especially valuable to higher-grade teachers and technicians, enabling you to maintain your equipment in good order.

Edgar Lehmann  
Tuesday, October 16 7–9 pm  
\$20 members/\$25 non-members

### Illustrating Jellyfish on Toned Paper

Workshop

Learn how to paint the transparent beauty of the jellies, using gouache and colored pencil on dark paper to capture their delicate forms. View the Academy's jellyfish collection as well as photos for inspiration.

Carolynne Griffin  
Saturday and Sunday, November 3 and 4 10 am–4 pm  
\$100 members/\$110 non-members

### Sea Floor and More: The Geology of San Francisco

Seminar and Field Trip

Although many people are familiar with the presence of our major active fault zones, few are aware of the fantastic origin of the rocks forming the famous hills and cliffs of San Francisco. Learn the basics of plate tectonics, California geology, and how the Franciscan rocks have shaped the scenery of the City. Visit spectacular outcrops of the major types of Franciscan rocks around the city.

Dawn Zemo  
Seminar: Thursday, November 8 7–9 pm  
Field Trip: Saturday, November 10 10 am–4 pm  
\$50 members/\$55 non-members

*FIELD TRIPS, cont. on pg. 11*



---

## LECTURES

---

*FIELD TRIPS, cont. from pg. 10*

### Leonid Watch 2001

#### Family Field Trip

Join astronomers from Morrison Planetarium at the Academy's Hume Observatory in Sonoma County for Leonid Watch 2001. The annual Leonid meteor shower is expected to put on a very good show this year, perhaps even a meteor storm! Spend the early evening exploring the autumn skies with telescopes; then settle in for the night to watch for Leonids. Camp on the lawn or deck of our rustic cottage, with a kitchen, bathrooms, and magnificent view. For those who prefer, sleep inside. Open to families with children six years and older.

Kirsten Vanstone

Saturday 4:30 pm to Sunday 9am, November 17-18

\$40 adult/\$35 child, members

\$45 adult/\$40 child, non-members

### Lectures

**Lectures are typically held in the Morrison Auditorium at 7:30 pm. Please confirm times and location at (415) 750-7096. All lectures are \$8 members/\$12 non-members. To order tickets in advance, please use the order form on page 14.**

### Russian California: Maritime Activities and Their Perception in California Today

A Lecture with John Middleton

Foreign Member, Russian Academy of Science,  
Center for Research on Russian America and  
Russian-American Relations

Between 1806 and 1863, the Russian-America Company and the Russian Imperial Navy conducted a series of diplomatic, trade, and scientific voyages along the western coast of North America. This lecture complements the Academy's new exhibit, ***Russia's Great Voyages to America***, which describes the wealth of material that was garnered from the Russian expeditions. In fact, much of our knowledge of the peoples and places on the shores of the North Pacific Ocean finds its roots in the brilliant maps, reports, and art works provided by the Russians.

John Middleton, the humanities and science advisor for the Anchorage Museum during the planning of this exhibit, discusses how these voyages had a significant and diverse impact on California history as well as modern perceptions of those maritime activities today.

Tuesday, October 16

### The Art and Activism of Ansel Adams

A Lecture with Dr. Jonathon Spaulding  
Biographer and Historian

More than any other artist of modern times, Ansel Adams combined creative vision and political action. His images of

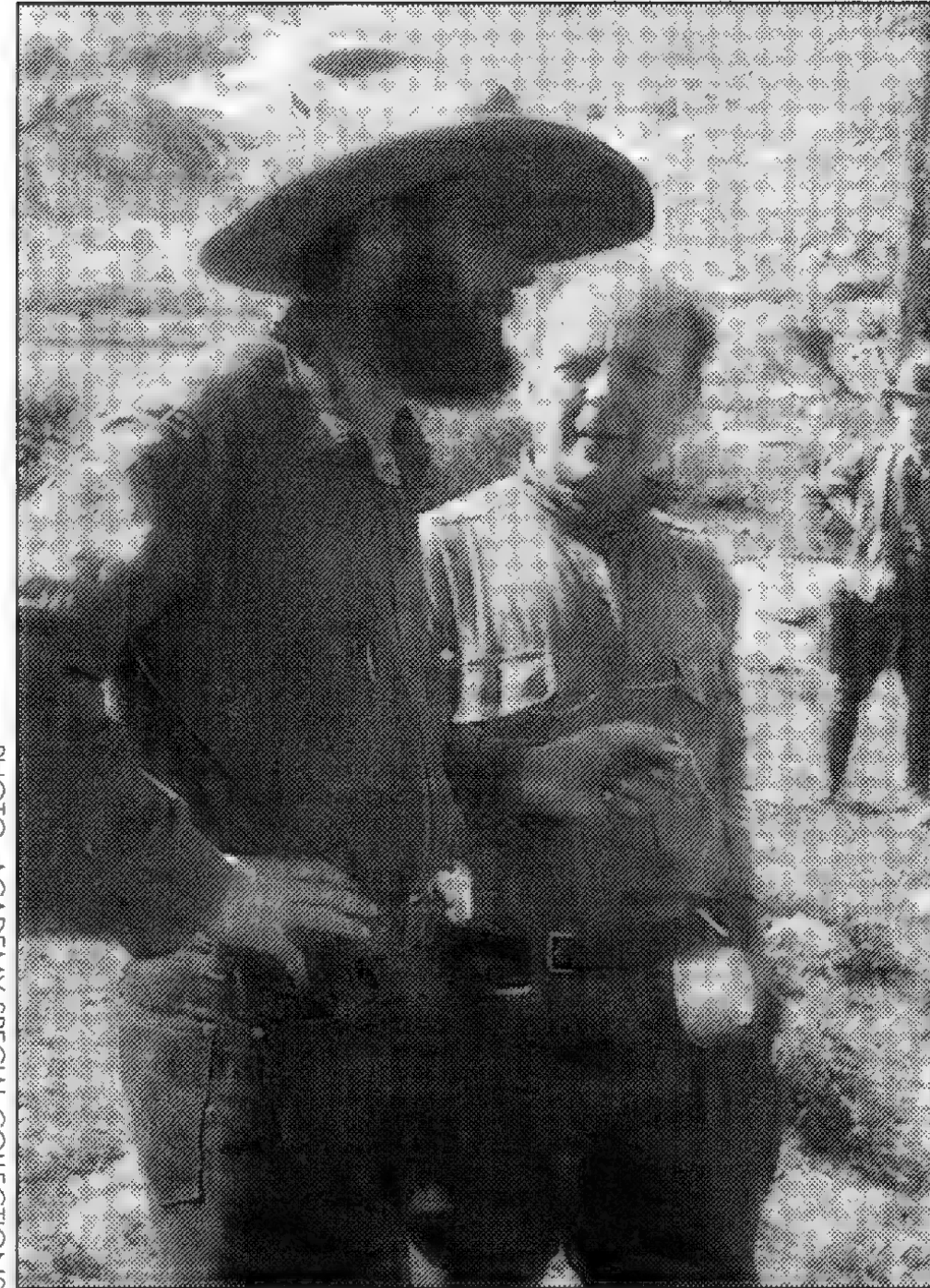


PHOTO: ACADEMY SPECIAL COLLECTIONS

*Ansel Adams in Yosemite*

the American landscape have become classics of photography and icons of the environmental movement. As an artist, Adams found his inspiration in the wild lands of California and the West. During nearly six decades on the front lines of the conservation movement, including 37 years as a director of the Sierra Club,

Adams worked to protect those lands for future generations. How did these two strands of his life come together to form one of the great creative and political legacies of the twentieth century? Join Dr. Jonathan Spaulding, author of *Ansel Adams and the American Landscape: A Biography*, as he explores the art and activism of one of San Francisco's best-known native sons.

Thursday, October 25

### Beyond the Last Village

A Lecture with Alan Rabinowitz

Director of the Science and Exploration Program,  
the Wildlife Conservation Society

In 1993, Alan Rabinowitz, called the "Indiana Jones" of wildlife science by the *New York Times*, arrived for the first time in the country of Myanmar. His goal was to survey the country's remaining wildlife and establish a wildlife research and conservation program. He succeeded beyond all expectations and not only discovered a species of primitive deer completely new to science but also played a vital role in the creation of Hkakabo Razi National Park, now one of Southeast Asia's largest protected areas. In his new book *Beyond the Last Village*, Rabinowitz takes the reader along on his journey of exploration, danger, and discovery in this remote corner of the planet—the southeast edge of the Himalayas where tropical rain forest and snow-covered mountains meet.

Alan Rabinowitz is Director of the Science and Exploration Program at the Wildlife Conservation Society based in the Bronx, New York. He is a frequent contributor to *Natural History* and is the author of two previous books: *Jaguar* and *Chasing the Dragon's Tail*.

Thursday, November 29



---

# MORRISON PLANETARIUM

---

All lectures are in the Morrison Planetarium at 7:30 pm. Tickets are \$3 and can be reserved in advance or purchased at the door. Call (415) 750-7127.

The upcoming speakers for the Benjamin Dean Lecture Series are taking audiences on a strange and convoluted journey through many dimensions of unobservable matter and repellent forces in what is called the “dark universe.”

Starting in 1998, two independent research teams of astronomers were studying the expansion of the universe to determine its assumed rate of deceleration, in the hopes of pin-pointing if and when the force of gravity would cause an eventual collapse of the universe: a “big crunch” as opposed to the generally accepted “big bang.” Instead both groups found evidence that supports the surprising conclusion that the expansion of our universe is in fact accelerating. This serendipitous result is turning our concepts of the universe topsy-turvy. If it is confirmed, it will have major implications for cosmology, as these two lecturers discuss.

## Beauty and the Accelerating Universe

Dr. Mario Livio, Space Telescope Science Institute in Baltimore, Maryland

Dr. Mario Livio asks if the universe is truly accelerating or if we are being fooled by our interpretation of data of distant supernova explosions. Only more time and data will tell. But if it is confirmed, just as important as the cosmological implications is the fact that the discovery of an accelerated expansion challenges the centuries-old belief that any fundamental theory of the universe must be “beautiful.” But how do you actually define “beauty” in a physical theory? Will we find our universe ugly after all? A booksigning will follow the lecture.

*Tuesday, October 16*

## Will the Universe Expand Forever?

Dr. Neta A. Bahcall, Department of Astrophysical Sciences at Princeton University

Dr. Neta Bahcall will consider whether the ultimate fate of the universe could be an eternal expansion or an eventual re-collapse. Which scenario plays out depends on how much matter is in the universe and whether the universe contains unseen dark energy that opposes the gravitational pull of matter.

Taking into account recent critical observations of distant supernovae, clusters of galaxies, and the cosmic microwave background radiation. Dr. Bahcall will explain why it appears that the universe will expand forever, growing ever larger, colder and darker.

*Tuesday, November 20*

## Sky Shows

### The Living Universe

Microfossils on Mars? Bacteria on the Moon? Find out how nature distributes and recycles the stuff of life throughout the cosmos and explore the fascinating ways that life endures on Earth...and possibly beyond!

*October 1 – November 25 Weekdays 2 pm Weekends 2 & 3 pm*

### Dark Matters

To our eyes, the Universe is made of both the light and the dark. How important is it that we be able to see the night sky to understand it? What holds it together? What pushed it apart? From dark skies and dark events to dark matter and dark energy, explore why the dark... matters.

*October 1 – November 25 Weekends 1 pm*

### The Sky Tonight

Take a naked-eye tour of the current night sky over San Francisco, including constellations, planets, the Moon, and other celestial sights!

*October 1 – November 25 Weekends 4 pm*

### What's Up?

Family Show

In this show for families, explore the sky and some of its wonders: the Sun, the Moon, the stars, and the planets! Identify constellations and the “Man in the Moon.” See satellites and have fun under the stars with a favorite of our school show audiences, the cosmic cartoon critter, Moon Mouse!

*October 1 – November 25 Weekends 12 pm*

**Schedules are subject to change. Shows will be added to the schedule on the first Wednesday of each month. Please call (415) 750-7141 for recorded information and schedules.**

**The Planetarium will be closed Thursday, November 22 for Thanksgiving.**

**The Planetarium will be closed from Monday, November 26–Thursday, November 29 to install The Christmas Star, which premieres Friday, November 30th at 2 pm. In this annual favorite, we'll explore the winter sky and look at possible astronomical explanations for the Star of Bethlehem.**

## Upcoming Benjamin Dean Lectures

### The Universe's Unseen Dimensions

Dr. Gia Dvali from New York University

*December 11*

### Eternal Inflation

Dr. Alexander Vilenkin

*January 29*



## EVENTS & GIFTS

### Halloween 2001: Get Batty at the Swamp Romp

Friday, October 26



PHOTO: DONG LIN

*Collections Manager Dr. David Catania and Halloween guests*

When you think of dried spiders and pickled snakes in bottles, the California Academy of Sciences might come to mind. Whether it's Halloween or not, the Academy's 16 million-odd biological specimens can be pretty scary. A frightening sample of these will be on display at the Academy's annual Halloween Party, the Swamp Romp, on Friday, October 26 from 6:30 to 9 pm. Activities will include Go Fish, Boo bowling, pumpkin painting, mask making, special Planetarium shows, and musical entertainment.

Ann Kaufman is chair of the Host Committee. Come join our mad scientists and their spooky specimens at one of the Academy's most popular events. For more information, please call (415) 750-7216.

### Summer Gala—The Bass-stille Bash

Bastille Day was the occasion for the Academy's 10th Annual Summer Gala, the "Bass-stille Bash." Over 1,200 Marie Antoinettes, Louis XVI's, Robespierres, and Madames Defarge converged on the august halls of the Academy for one of the



PHOTO: DONG LIN

*Left to right: Shelley Dickerson, Larissa Roesch and Daphne Jackson.*

season's most lively parties. Guests were entertained royally with sumptuous catering by Dan McCall Associates and by the revolutionary entertainment of Ape, Fifi Le Tour, Impazdor Dali, the Patrick Green Trio, Paul Nathan Magic Entertainers, Tainted Love, and the Zydeco Flames.

The Academy is appreciative of the great work performed by the Gala Committee, co-chaired by Christine Chesson and Dodie Sutro Crawford. We thank Wells Fargo, Webvan, Gap, Banc of America Securities, Pepsi, Ozumo Restaurant, and Pearls of Passion International, among many other corporate and individual benefactors, for their generous support of the "Bass-stille Bash." Proceeds support the Academy's research, exhibition, and educational programs.

### Anglers All Lures Guests to Opening

Considered one of the most beautiful exhibits ever seen at the Academy, **Anglers All: Humanity in Midstream** opened in July and runs to mid-October. It is a lyrical stroll

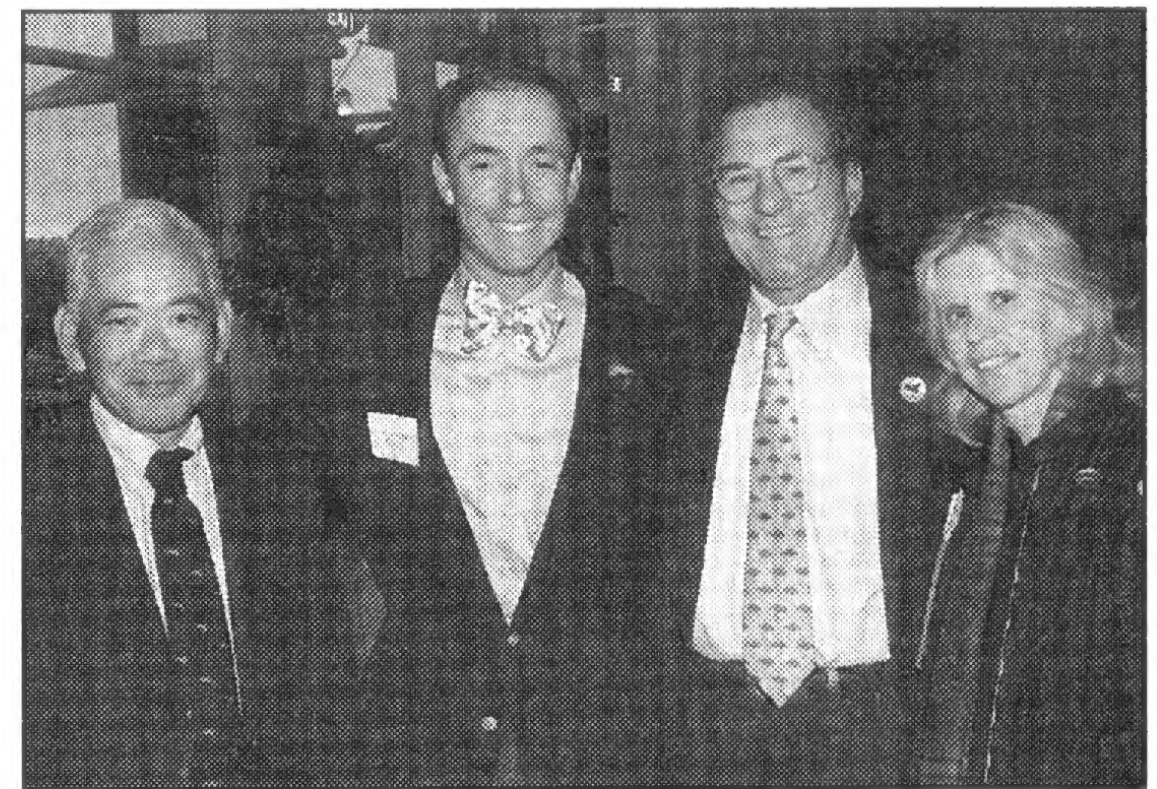


PHOTO: DONG LIN

*Trustee Nelson Ishiyama, Curator Dr. John McCosker, Michael Stephanian, and Trustee Tania Stephanian*

through the crafted history and understated aesthetics of fly-fishing. An exhibit from the American Museum of Fly Fishing in Manchester, Vermont, dozens of rods and reels from the 18th century to the present are on display. Artwork, journals, and books hundreds of years old accompany personal angling items from John Quincy Adams, Ernest Hemingway, Herbert Hoover, Dwight Eisenhower, Zane Grey, and Aldo Leopold, author of *A Sand County Almanac*. Visitors will see a copy of Izaak Walton's *Compleat Angler* (1653). **Anglers All** combines entomology and ichthyology with ecosystem dynamics, hydrology, art, and history to fabricate a compelling story of art, nature, and sport.

### New Corporation and Foundation Gifts

The California Academy of Sciences wishes to acknowledge the generous gifts from new corporation and foundation sponsors. The Bohannon Foundation, the RGK Foundation, J.P. Morgan, Global Education Grantmakers, AEGON Transamerica, and REI, are welcomed into the community of Academy supporters. Like other private support from corporations, foundations, and individuals, these gifts have a powerful impact on the ability of the Academy to serve the needs of the community through its research, exhibits, and educational programs.



## Order Form

**YOUR NAME:** \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Member # \_\_\_\_\_  
 Phone \_\_\_\_\_

### FIELD TRIPS, SEMINARS AND WORKSHOPS

To register for any course at the Academy, do one of the following:

- Call Youth and Adult Education at (415) 750-7100
- Email [edregistrar@calacademy.org](mailto:edregistrar@calacademy.org)
- Visit [www.calacademy.org/education](http://www.calacademy.org/education) to download complete registration forms

LECTURES	QTY MEMBERS	QTY NON-MEMBERS	TOTAL
Shark Under Attack	FREE	_____x\$12	=_____
Getting to the Bottom of the Bay	FREE	_____x\$12	=_____
Russian California	_____x\$8	_____x\$12	=_____
The Art and Activism of Ansel Adams	_____x\$8	_____x\$12	=_____
Beyond the Last Village	_____x\$8	_____x\$12	=_____
Beauty and the Accelerating Universe	_____x\$3	_____x\$3	=_____
Will the Universe Expand Forever?	_____x\$3	_____x\$3	=_____

To purchase tickets by phone, call (415) 750-7128.

### BROCHURE REQUEST

☐ Charitable Giving After the 2001 Tax Act

### DONATIONS

☐ Yes, I would like to support the Academy of Sciences with a donation. \$ \_\_\_\_\_

### GIFT MEMBERSHIP FORM

I wish to give a gift membership to: \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_

Payment enclosed: \_\_\_\_\_

**TOTAL PAYMENT ENCLOSED** \$ \_\_\_\_\_ ☐ Check (made payable to CAS)

☐ Visa ☐ Mastercard ☐ American Express (\$10 minimum on credit card orders)

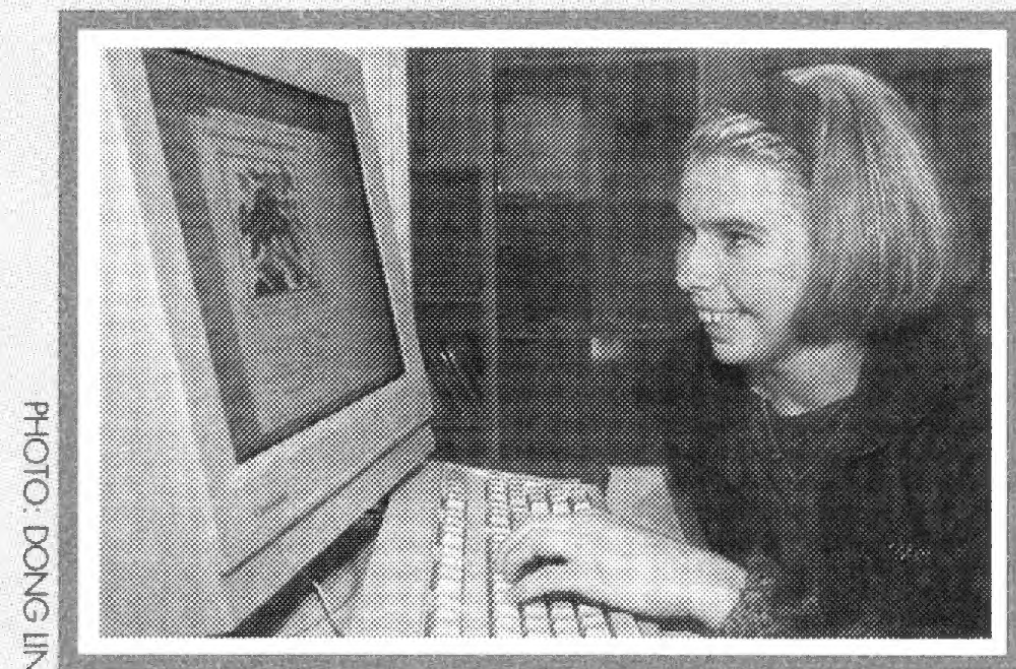
Card Number \_\_\_\_\_ Exp. Date \_\_\_\_\_

Daytime Phone \_\_\_\_\_

Mail payment and order form to: Membership Office, Ticket Services, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118-4599.

Include a self-addressed, stamped envelope for each series to which you subscribe.  
 No refunds/exchanges.

## Volunteer Profile: Nyri Scanlon



*Nyri Scanlon*

The first thing you notice about Academy volunteer Nyri Scanlon is her engaging smile and then you notice the wheelchair. Nyri was born with a rare brain dysfunction that impairs her mobility and speech. The computer is one of her best friends as is the Center for Accessible Technology, a facility that helps disabled children communicate.

A volunteer since 1988, Nyri came as a work study student to the Junior Academy through the Mayor's Office of Youth Employment and Training. It was a perfect match as Nyri was not only computer savvy, she was working toward a degree in environmental science. When the Biodiversity Resource Center opened in 1991, Nyri's computer skills were put to use. Located on the Academy's main floor, the Biodiversity Resource Center provides access to a variety of informational resources on biodiversity issues. It serves a broad range of users and provides access via the Internet, bibliographic databases, books and videos. Volunteers assist staff and visitors with causal inquiries as well as advanced research questions.

"People appreciate me." Nyri says as she describes her experiences helping people out, showing them how to navigate the Internet. Nowadays, Nyri does a lot for the Academy's scientists who depend on her to update them on current journal articles relevant to their specialties.

During the school year Nyri is at the Academy every Sunday and twice a week during the summer. Her contribution to the Academy is highly regarded by both visitors and staff.

If you are interested in volunteering, please call 750-7154.



Published by  
 California Academy of Sciences

**Executive Director**  
 Patrick Kociolek, Ph.D.

**Publications Manager**  
 Keith Howell

**Editor**  
 Amy Cramer

**Associate Editor**  
 Bethany Morookian

**Design & Production**  
 Martha Murray Design

**Editorial Office:** All editorial inquiries should be directed to:

Dept. of Public Relations  
 & Community Affairs  
 California Academy of Sciences  
 Golden Gate Park  
 San Francisco, CA 94118-4495  
 (415) 750-7295



## What does the 2001 Tax Act Mean for You?

On May 26, 2001, Congress passed the largest tax reduction in two decades, the Economic Growth and Tax Relief Reconciliation Act (EGTRRA) of 2001.

The new law reduces income tax, repeals the estate tax in stages until it is eliminated by 2010, eliminates the marriage penalty, increases the child credit, increases IRA contribution limits, and sent immediate rebates to taxpayers. However, the gift tax remains—taxpayers can give up to \$1,000,000 during their lifetime without gift tax. Above that, gifts are taxed at a rate equal to the highest individual income tax rate.

### What the Act Means for Academy Donors

People give to the Academy for a variety of reasons: they have a strong connection to the museum; they believe strongly in its mission to explore and explain the natural world; they want to support programs of particular interest to them; they want to ensure that the Academy will continue into the future. The new tax law facilitates giving opportunities and the Academy's Development office welcomes the opportunity to talk to you and discuss investment plans that can be beneficial to both you and the work of the Academy.

The Academy has an informative new brochure, *Charitable Giving After the 2001 Tax Act*, available for members. Please use the Order Form on page 14 to request a copy or contact Nancy Baker at (415) 750-7216 or email [nancyabaker@calacademy.org](mailto:nancyabaker@calacademy.org).

*Nancy A. Baker, J.D. is the Planned Giving Officer for the Academy. An attorney with years of experience in estate planning, trusts and charitable giving, she is available to discuss questions you may have about charitable gift planning.*

---

## ACADEMY TRAVEL 2002

---

### National Parks of Southern Spain

With optional extension to the Canary Islands  
April 28–May 13, 2002 with Frank and Mary Beth  
Almeda

This extensive journey through Andalusia to discover both remote and popular sites has been designed exclusively for the Academy. Walks in three national parks—Donana, Cazorla and Hornachuelos—will present an opportunity to see the flora and fauna of a Spain that few travelers experience. A geological thread will be woven into this tour with an overnight in Ronda, a town dramatically perched on a deep gorge, and a stop in Antequerra to see El Torcal de Antequera, one of the most spectacular geological karst formations in Europe. You will also visit Seville's Alcazar, Granada's fabled Alhambra and Cordoba's great mosque. Complete your tour with a post-trip extension of the Canary Islands, a land of volcanic peaks.

Cost: \$5,360 per person based on double occupancy + \$1,201  
airfare San Francisco/Seville, Madrid/San Francisco  
Extension cost: \$1,790 (land and air) per person based on  
double occupancy

For information call the Academy Travel office at  
(800) 853-9372 or (650) 365-6244.

### Australia Air Safari:

#### A Natural History Expedition by Private Aircraft

May 7–25, 2002  
With Bob and Gail Drewes

Flying on your exclusively chartered 27-passenger aircraft (where scheduled service simply does not exist) you will chart your own route to the Great Barrier Reef, across Northern Queensland, the Northern Territory and Western Australia. You will soar over the vast grazing plains of the Great Artesian Basin, the steep, rocky gorges of the Kimberley region and the brilliant sandstone beehive domes in Bungle Bungle National Park. In Arnhem Land—60,000 square miles of pristine wilderness owned by Aborigines—you will visit the storied Ubirr and Nourlangie Rock, where rock art depicts hunters and other mythical figures central to the 20,000-year-old culture. There will also be many opportunities to observe wallabies, kangaroos and the numerous reptiles and bird species found only in Australia from the Yellow Waters Billabong in Kakadu National Park to both coasts of Australia where you will swim and snorkel.

Cost: \$10,990 per person, based on double occupancy +  
\$1,629 round trip airfare San Francisco/Sydney, Sydney/  
Cairns, Perth/San Francisco.



### MEMBER INFORMATION

Guided Tours: Free one-hour highlight tours daily

Open every day of the year.

Summer hours (Memorial Day weekend to Labor Day) 9 am – 6 pm

Winter hours (Labor Day weekend to Memorial Day) 10 am – 5 pm

Information Hotline: (415) 750-7145

Website: [www.calacademy.org](http://www.calacademy.org)

Weekend Information: (415) 750-7375

Special Lectures: (415) 750-7128

Membership: (415) 750-7111

Library: (415) 750-7102

Education: (415) 750-7100

## California Academy of Sciences Photo Contest For Children

### Categories:

#### 1. California Wild: Plants, Animals, and Landscapes

This subject is open to two age groups:

A. under 13 years old

B. under 19 years old

#### 2. Here at the Academy:

Photographs taken inside the California Academy of Sciences.

This subject is open to everyone ages 6 to 18.

### Prizes:

1st prize in each category:

\$100 voucher for Academy classes and camps.

Honorable Mention:

\$50 Gift Certificate at the Academy Store. Others may be awarded certificates and included in the exhibit.

### How To Enter:

A total of up to six entries per person. Entries must be either color transparencies (including slides) or color or black and white prints. Prints should not be smaller than 5" x 7" or larger than 11" x 14". All entries must be accompanied by an official entry form. Entry forms, rules, and other details are available on our website: [www.calacademy.org/photocompetition](http://www.calacademy.org/photocompetition). Or send

a self-addressed stamped envelope (SASE) to: California Wild, Photo Competition, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118, or FAX request to: (415) 221-4853.

**Deadline: January 10, 2002**

**Costs:** There is no entry fee, but anyone wanting their material returned should include a SASE. All winning photographs become the property of the California Academy of Sciences.

**Note: Employees of the California Academy of Sciences and their immediate family members are not eligible to enter.**



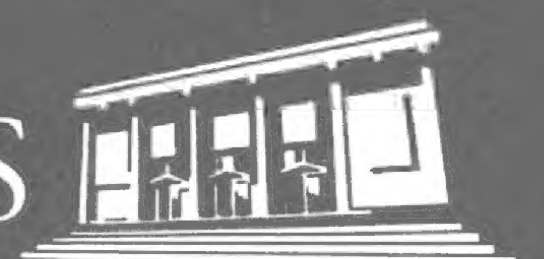
PHOTO: PAT MORALES



PHOTO: CHRIS KIBRE



# CALIFORNIA ACADEMY OF SCIENCES



Golden Gate Park

Aquarium

Natural History Museum

Planetarium

Dedicated to Scientific Research & Education, Inspiring Respect for the Natural World

The Academy encourages the use of public transportation.